

In the claims:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims for the present application.

Claims 1-34 (canceled).

35. (Original) A method of repairing a hole in the exterior of an airplane, comprising:
applying alternating layers of (1) an ultraviolet light curable formulation which comprises an acrylic oligomer, an acrylic monomer, and a photoinitiator and (2) woven fiberglass fabric to fill the hole and to form an ultraviolet light curable composition;
creating a vacuum across at least one side of the ultraviolet light curable composition;
irradiating the ultraviolet light curable formulation with ultraviolet light to cure the formulation to produce a cured composition; and
removing the vacuum.
36. (Original) The method of claim 35, wherein the ultraviolet light curable formulation comprises: an acrylate oligomer, a combination of two or more acrylic monomers, a bis-acylphosphine oxide and an alpha hydroxy ketone, wherein the cured formulation formed from the curable formulation has a T_g greater than 150°C.
37. (Original) The method of claim 35, wherein the acrylic oligomer is an epoxy acrylate, urethane acrylate, polyester acrylate, polyether acrylate, amine modified polyether acrylate, acrylic acrylate, or combination thereof.
38. (Original) The method of claim 35, wherein the acrylic oligomer is an epoxy acrylate.
39. (Original) The method of claim 35, wherein the acrylic monomer is selected from the group consisting of: methyl methacrylate (MMA), ethyl methacrylate, methacrylic acid (MA), isobornyl methacrylate (ISBM), ethylene glycol dimethacrylate (EGDM), ethoxylated bisphenol A diacrylate esters (BPADAE), tetraethylene glycol dimethacrylate (TEGDM), diethylene glycol dimethacrylate (DEGDM), diethylene glycol diacrylate (DEGDA), tris(2-hydroxyethyl) isocyanurate triacrylate (ISOTRI); a diacrylate, an alkyl or hydroxy alkyl esters

of acrylic acid; a diacrylate, an alkyl or hydroxy alkyl esters of methacrylic acid; butyleneglycol diacrylate and triacrylate, 1,6-hexanediol diacrylate, tetraethyleneglycol diacrylate and triacrylate, polyethylene glycol diacrylate and triacrylate, bisphenol A diacrylate and triacrylate, pentaerythritol diacrylate and triacrylate and tetraacrylate; methyl acrylate, ethyl acrylate, butyl acrylate, 2-ethylhexyl acrylate, 2-hydroxyethyl acrylate, isobornyl acrylate, ethylene glycol diacrylate, propylene glycol diacrylate, neopentyl glycol diacrylate, hexamethylene glycol diacrylate, 4,4'-bis(2-acryloyloxyethoxy)diphenylpropane, trimethylolpropane triacrylate, vinyl acrylate, and combinations thereof.

40. (Original) The method of claim 35, comprising as the acrylic monomer a combination of tris(2-hydroxyethyl)isocyanurate triacrylate, isobornyl methacrylate, methyl methacrylate, 1,6-hexanediol diacrylate, and methacrylic acid.

41. (Original) The method of claim 35, wherein the formulation comprises about 20 to about 70 percent of the acrylic oligomer, about 30 to about 80 percent of the two or more acrylic monomers, and 0.5 to about 3 percent of the photoinitiator.

42. (Original) The method of claim 35, wherein the wherein the photoinitiator is a combination of a bis-acylphosphine oxide and an alpha hydroxy ketone.

43. (Original) The method of claim 35, wherein the wherein the photoinitiator is a combination of a bis-acylphosphine oxide and an alpha hydroxy ketone, wherein the bis-acylphosphine oxide to alpha hydroxy ketone ratio is from about 1:4 to about 4:1.

44. (Original) The method of claim 35, wherein the cured composition has a T_g greater than 150°C.

Claim 45 (canceled).

46. (New) A method of repairing a hole in the exterior of an airplane, comprising:
applying alternating layers of (1) an ultraviolet light curable formulation which comprises at least 20 percent by weight of an acrylic oligomer, at least about 30 percent by weight of an acrylic monomer, and a photoinitiator and (2) woven fiberglass fabric to fill the hole and to form an ultraviolet light curable composition;

creating a vacuum across at least one side of the ultraviolet light curable composition;

irradiating the ultraviolet light curable formulation with ultraviolet light to cure the formulation to produce a cured composition; and

removing the vacuum.

47. (Original) The method of claim 46, wherein the ultraviolet light curable formulation comprises: an acrylate oligomer, a combination of two or more acrylic monomers, a bis-acylphosphine oxide and an alpha hydroxy ketone, wherein the cured formulation formed from the curable formulation has a T_g greater than 150°C.

48. (Original) The method of claim 46, wherein the acrylic oligomer is an epoxy acrylate, urethane acrylate, polyester acrylate, polyether acrylate, amine modified polyether acrylate, acrylic acrylate, or combination thereof.

49. (Original) The method of claim 46, wherein the acrylic oligomer is an epoxy acrylate.

50. (Original) The method of claim 46, wherein the acrylic monomer is selected from the group consisting of: methyl methacrylate (MMA), ethyl methacrylate, methacrylic acid (MA), isobornyl methacrylate (ISBM), ethylene glycol dimethacrylate (EGDM), ethoxylated bisphenol A diacrylate esters (BPADAE), tetraethylene glycol dimethacrylate (TEGDM), diethylene glycol dimethacrylate (DEGDM), diethylene glycol diacrylate (DEGDA), tris(2-hydroxyethyl) isocyanurate triacrylate (ISOTRI); a diacrylate, an alkyl or hydroxy alkyl esters of acrylic acid; a diacrylate, an alkyl or hydroxy alkyl esters of methacrylic acid; butyleneglycol diacrylate and triacrylate, 1,6-hexanediol diacrylate, tetraethyleneglycol diacrylate and triacrylate, polyethylene glycol diacrylate and triacrylate, bisphenol A diacrylate and triacrylate, pentaerythritol diacrylate and triacrylate and tetraacrylate; methyl acrylate, ethyl acrylate, butyl acrylate, 2-ethylhexyl acrylate, 2-hydroxyethyl acrylate, isobornyl acrylate, ethylene glycol diacrylate, propylene glycol diacrylate, neopentyl glycol diacrylate, hexamethylene glycol diacrylate, 4,4'-bis(2-acryloyloxyethoxy)diphenylpropane, trimethylolpropane triacrylate, vinyl acrylate, and combinations thereof.

51. (Original) The method of claim 46, comprising as the acrylic monomer a combination of tris(2-hydroxyethyl)isocyanurate triacrylate, isobornyl methacrylate, methyl methacrylate, 1,6-hexanediol diacrylate, and methacrylic acid.
52. (Original) The method of claim 46, wherein the formulation comprises about 20 to about 70 percent of the acrylic oligomer, about 30 to about 80 percent of the two or more acrylic monomers, and 0.5 to about 3 percent of the photoinitiator.
53. (Original) The method of claim 46, wherein the photoinitiator is a combination of a bis-acylphosphine oxide and an alpha hydroxy ketone.
54. (Original) The method of claim 46, wherein the photoinitiator is a combination of a bis-acylphosphine oxide and an alpha hydroxy ketone, wherein the bis-acylphosphine oxide to alpha hydroxy ketone ratio is from about 1:4 to about 4:1.
55. (Original) The method of claim 46, wherein the cured composition has a T_g greater than 150°C.